

Estimated Bulk Sanitary Sewer and Treatment Rates for City of Reading Wastewater Treatment Plant
Based on the 2012 Capital Improvements Program ("2012 CIP")

Date Estimated: July 19, 2012

The data presented in the Tables below represent the City's best estimate and are subject to change based on fluctuations in flow, operational costs and requirements for capital improvements. The rates were recently revised because the results of the SSM Group October 2011 Special Study ("Special Study") justified reducing the required treatment capacity of the Wastewater Treatment Plant from 28.5 MGD to 20.5 MGD, resulting in significantly less construction and associated costs.

Table 1: Estimated Annual Total Charge Based on 2012 CIP

Municipality (Estimated Reserved Capacity)	2013	2014	2015	2016	2017	2018	2019	2020	2021
1 Antietam Valley Municipal Authority (86,558 gal/day)	\$76,505	\$92,737	\$111,726	\$147,433	\$151,934	\$177,182	\$180,281	\$177,966	\$180,516
2 Bern Township (170,000 gal/day)	\$166,502	\$198,785	\$215,545	\$285,575	\$294,316	\$343,717	\$349,684	\$340,814	\$345,584
3 Cumru Township (1,875,832 gal/day)	\$1,536,204	\$1,884,951	\$1,932,161	\$2,693,713	\$2,778,645	\$3,302,526	\$3,354,530	\$3,414,451	\$3,457,617
4 Kenhorst Borough (266,190 gal/day)	\$312,279	\$364,108	\$367,136	\$477,533	\$491,985	\$570,746	\$581,009	\$565,964	\$574,318
5 Laureldale Borough (696,402 gal/day)	\$1,113,042	\$1,255,980	\$1,243,276	\$1,539,183	\$1,584,290	\$1,803,794	\$1,839,413	\$1,783,947	\$1,814,103
6 Mohnton Borough (46,742 gal/day)	\$69,822	\$79,295	\$83,000	\$102,850	\$105,866	\$120,577	\$122,954	\$119,718	\$121,741
7 Muhlenberg Township (6,011,146 gal/day)	\$4,029,583	\$5,124,988	\$5,264,233	\$7,681,401	\$7,929,629	\$9,564,309	\$9,702,197	\$10,255,067	\$10,374,606
8 City of Reading (9,541,933 gal/day)	\$10,740,201	\$12,586,793	\$12,761,197	\$16,708,533	\$17,216,264	\$20,020,600	\$20,376,088	\$20,408,991	\$20,711,774
9 Robeson Township (44,000 gal/day)	\$16,647	\$24,346	\$25,251	\$42,611	\$44,086	\$55,419	\$56,017	\$56,528	\$56,896
10 Shillington Borough (70,556 gal/day)	\$77,271	\$90,872	\$90,461	\$119,551	\$123,204	\$143,755	\$146,263	\$143,039	\$145,063
11 Spring Township (1,542,600 gal/day)	\$2,051,329	\$2,357,674	\$2,408,243	\$3,055,042	\$3,146,034	\$3,615,815	\$3,683,991	\$3,722,808	\$3,783,343
12 Wyomissing Borough (65,074 gal/day)	\$100,817	\$114,095	\$115,751	\$143,391	\$147,595	\$168,086	\$171,401	\$169,250	\$172,138

Table 2: Comparison to 2011 CIP Rate Projections (circulated in March 2012) to the 2012 CIP Rate Projections

	2013	2014	2015	2016	2017	2018	2019	2020	2021
13 Antietam Valley Municipal Authority	-\$28,845	-\$22,852	-\$56,867	-\$27,248	-\$46,946	-\$25,801	-\$27,111	-\$28,119	-\$29,078
14 Bern Township	-\$61,593	-\$47,870	-\$110,945	-\$52,705	-\$91,319	-\$49,794	-\$52,305	-\$53,217	-\$55,016
15 Cumru Township	-\$588,089	-\$472,842	-\$1,138,924	-\$488,417	-\$906,191	-\$448,564	-\$469,119	-\$507,436	-\$523,897
16 Kenhorst Borough	-\$112,125	-\$84,439	-\$179,383	-\$88,711	-\$149,726	-\$84,667	-\$89,075	-\$90,775	-\$93,908
17 Laureldale Borough	-\$383,373	-\$275,360	-\$523,342	-\$291,108	-\$456,003	-\$285,432	-\$301,500	-\$307,376	-\$318,545
18 Mohnton Borough	-\$24,246	-\$17,584	-\$35,041	-\$19,445	-\$30,505	-\$19,057	-\$20,128	-\$20,626	-\$21,376
19 Muhlenberg Township	-\$1,612,915	-\$1,350,952	-\$3,472,468	-\$1,371,564	-\$2,693,057	-\$1,227,773	-\$1,278,767	-\$1,467,856	-\$1,513,882
20 City of Reading	-\$3,881,245	-\$2,943,364	-\$6,353,923	-\$3,096,611	-\$5,276,357	-\$2,944,736	-\$3,096,339	-\$3,281,892	-\$3,395,408
21 Robeson Township	-\$7,899	-\$7,525	-\$22,879	-\$7,267	-\$16,693	-\$5,984	-\$6,145	-\$6,473	-\$6,628
22 Shillington Borough	-\$28,047	-\$21,370	-\$46,238	-\$22,083	-\$38,128	-\$20,893	-\$21,951	-\$22,453	-\$23,216
23 Spring Township	-\$723,258	-\$533,776	-\$1,093,181	-\$572,668	-\$931,487	-\$554,100	-\$584,146	-\$628,138	-\$650,636
24 Wyomissing Borough	-\$34,854	-\$25,144	-\$48,822	-\$27,113	-\$42,514	-\$26,576	-\$28,070	-\$29,310	-\$30,379
Total Savings	-\$7,486,490	-\$5,803,077	-\$13,082,012	-\$6,064,940	-\$10,678,926	-\$5,693,377	-\$5,974,657	-\$6,443,670	-\$6,661,969

Table 3: WWTP Estimated Costs based on 2012 CIP

	2013	2014	2015	2016	2017	2018	2019	2020	2021
25 Operational Treatment Costs	\$15,264,278	\$15,643,007	\$16,033,097	\$16,434,890	\$16,848,736	\$17,611,240	\$18,108,472	\$18,622,065	\$19,131,664
26 Operational Transportation Costs	\$2,081,492	\$2,133,137	\$2,186,331	\$2,241,121	\$2,297,555	\$2,401,533	\$2,469,337	\$2,539,372	\$2,608,863
27 Annual Debt Service	\$2,675,000	\$5,815,000	\$5,815,000	\$13,017,000	\$13,514,000	\$18,065,000	\$18,167,000	\$18,177,000	\$18,177,000
28 Annual Infrastructure Contingency Fund Charge	\$267,500	\$581,500	\$581,500	\$1,301,700	\$1,351,400	\$1,806,500	\$1,816,700	\$1,817,700	\$1,817,700
29 Total Revenue Requirements	\$20,288,271	\$24,172,644	\$24,615,928	\$32,994,711	\$34,011,691	\$39,884,272	\$40,561,509	\$41,156,137	\$41,735,228

The \$3,000,000 Impact Transfer is included as an operational expense; the total O&M costs of operating the Wastewater System (i.e., the combined O&M costs of the WWTP and Sewer System) were allocated with 88% designated to the Treatment Rate and 12% to the Transportation Rate based on historical trends.

The Annual Debt Service was estimated based on the revised 2012 Capital Improvement Program with a 20.5 MGD Wastewater Treatment Plant with revenue bonds procured at 5.4% interest and a \$10 Million low interest loan from Pennvest.

Table 4: Estimated Rates Based on 2012 CIP

[illegible]**Table 5: EDU Projections**[illegible]